

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings

Field No.	DEPTH (cm)	sample description
97BMF-101-2-a	9	first 4 inches tan very fine sand to silt, micaceous, no organics
97BMF-101-2-b	20	1/2 inch white leached zone, possibly clay (?), no organics
97BMF-101-2-c	24	tan medium to fine sand, wood fibers
97BMF-101-2-d	36	rusty tan medium to fine sand, iron staining, rootlets, wood fibers
97BMF-101-2-e	57	tan mostly fine sand, some medium sand, light iron-oxidation staining, specks of charcoal, no organics
97BMF-101-3-a	5	light white-gray clay, fibrous, some bits of moss
97BMF-101-3-b	15	dark layer, organics, rootlets
97BMF-101-3-c	29	gray medium to fine sand, micas, slight iron-oxidation, little or no organics
97BMF-101-3-d	40	tan-gray medium to fine sand, section of 1mm sized sand, sulfides, micas, no organics
97BMF-101-3-e	55	tan-gray clay-sized material at top of section, grades into fine sand, abundant mica, iron stains, no organics
97BMF-101-4-a	6	white-gray fine silt, no organics
97BMF-101-4-b	17	red-brown fine sand, micas, iron-oxidation, wood fibers
97BMF-101-4-c	23	red-brown transition zone between organic fibers and medium micaceous sand, no organics
97BMF-101-4-d	34	red-brown medium to fine micaceous sand, quartz, little to no organics
97BMF-101-4-e	55	red-brown fine sand to silt, grades to gray clay, micaceous, no organics
97BMF-101-5-a	5	light gray silt and mud
97BMF-101-5-b	14	dark brown organic layer
97BMF-101-5-c	21	transition zone to sandy tailings below, no organics
97BMF-101-5-d	30	brown silt and clay, mica, some iron-oxidation staining, bits of charcoal
97BMF-101-5-e	51	rusty brown medium sand, mica, iron-oxidation staining, charcoal
97BMF-101-6-a	4	medium gray fine silt, some mica, no sulfides, some wood fibers
97BMF-101-6-b	13	white and gray clay, no organics
97BMF-101-6-c	29	medium-brown fine sand to silt, mica, minor wood fiber
97BMF-101-6-d	47	medium-brown fine sand, silt and clay, iron-oxidation, some wood fiber
97BMF-101-6-e	60	dark brown clay, dark organic material
97BMF-101-7-a	7	tan-gray fine sand, silt, minor organic fiber
97BMF-101-7-b	17	organic layer, fresh mica
97BMF-101-7-c	22	tan and brown transition layer, mixed fine sand, fresh and oxidized mica, some organic fines
97BMF-101-7-d	31	tan blocky silt and clay, fresh and iron oxidized micas, minor iron-oxidation staining, no organics
97BMF-101-7-e	45	brown silt and clay, mica, altered remnant biotite, iron-oxidation, some charcoal
97BMF-101-7-f	59	brown waxy clay, very fine mica, dark organic material

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
97BMF-101-8-a	6	tan-gray silt and clay, some medium sand, no organics
97BMF-101-8-b	19	dark gray silt, minor iron staining, some charcoal
97BMF-101-8-c	29	light gray mud and silt, micas, some iron staining, wood fiber transition zone
97BMF-101-8-d	34	dark gray waxy clay, some fine sand, iron staining, some organics
97BMF-101-8-e	45	medium gray sand and clay, micaceous, moderate iron staining, some charcoal
97BMF-101-8-f	60	gray fine sand to silt, micaceous, moderate iron staining, no organics
97BMF-101-9-a	6	medium gray blocky silt and mud, fresh mica, charcoal
97BMF-101-9-b	19	lighter gray-brown medium to fine sand, silt, fresh micas, charcoal
97BMF-101-9-c	27	gray transition zone, charcoal, fresh micas
97BMF-101-9-d	44	light tan-gray silt, coarse to fine sand, fresh mica, some wood fibers
97BMF-101-10-a	3	brown well-sorted fine sand to silt, no sulfides, minor mica, no organics
97BMF-101-10-b	13	dark brown well-sorted fine sand to silt, no organics
97BMF-101-10-c	27	tan-brown fine sand to silt, slightly oxidized micas, some wood fibers
97BMF-101-10-d	42	medium-brown silt, medium to fine sand, micaceous, smaller micas are slightly oxidized, no organics
97BMF-101-10-e	57	rusty-brown silt, coarse to fine sand, a few pebbles to 1/4 inch
97BMF-101-11-a	6	brown and white silt, medium to fine sand, in white clay matrix, no organics
97BMF-101-11-b	19	dark brown clay and silt, moderate iron-oxidation, some wood fibers, rootlets
97BMF-101-11-c	26	white leached-clay transition zone, some micas, no organics
97BMF-101-11-d	31	brown and light-orange silt, fine sand, micaceous, root fibers
97BMF-101-11-e	39	tan fine sand, micaceous, strong iron-oxidation staining, no organics
97BMF-101-11-f	50	tan-gray blocky clay and silt, some mica, iron-oxidation, some wood fibers
97BMF-101-11-g	61	dark brown dense, waxy material, organic material
97BMF-101-12-a	5	tan fine sand, minor white clay, few 3mm pebbles, wood bits
97BMF-101-12-b	12	brown silt, some wood fibers
97BMF-101-12-c	21	dark brown silt, little mica, little iron-oxidation, root fibers
97BMF-101-12-d	32	dark brown blocky clay, some mica, iron-oxidation, root fibers
97BMF-101-12-e	49	tan coarse, medium, and fine sand, micaceous, fine sand at bottom of the section, iron-oxidation, no organics
97BMF-101-12-f	63	tan silt, iron-oxidation, micaceous, from bottom of the core

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
97BMF-101-13-a	4	light gray silt-sized tailings, fine quartz sand, no organics
97BMF-101-13-b	12	light gray silt-sized tailings, fine quartz sand, some light buff fine sand, some micas, no organics
97BMF-101-13-c	20	gray and dark gray silty sulfidic tailings, no organics
97BMF-101-13-d	34	gray and yellow fine-grained sand, fine quartz sand, no organics
97BMF-101-13-e	52	dark gray and yellow fine sand, fine quartz sand, some very fine material, no organics
97BMF-101-13-f	61	chocolate-brown and gray very fine tailings, fibrous peaty plug at bottom
97BMF-101-13-g	63	yellow streaked, fibrous peaty plug
97BMF-101-14-a	12	light gray-brown with a hint of yellow medium-to-fine sand, quartz sand, sulfur odor, no mica, no sulfides, no organics
97BMF-101-14-b	28	light gray-brown and yellow fine sand, quartz sand, no organics
97BMF-101-14-c	38	yellow silt, some white clay, no sulfides, no organics
97BMF-101-14-d	52	light gray with a hint of yellow fine sand, dark granules, fresh sulfides, no organics
97BMF-101-15-a	11	brown medium-to-fine sand, mixed with some coarse sand, 1/4" clasts, smells of sulfur, possible biotite, possibly a few fresh sulfides, no organics
97BMF-101-15-b	25	brown well-sorted silt, some leached white, some wood fibers
97BMF-101-15-c	36	chocolate-brown silt, minor oxidized mica, wood fiber
97BMF-101-15-d	46	brown silt, oxidized mica, little or no wood
97BMF-101-15-e	53	dark organics, black clay, oxidized mica
97BMF-101-15-f	61	brown medium-to-fine sand, micaceous, no organics
97BMF-101-15-g	64	brown, organic material
97BMF-101-16-a	12	medium-brown clay and silt, micaceous, minor root fiber
97BMF-101-16-b	31	medium-brown and gray silt, fine sand, some charcoal
97BMF-101-16-c	40	medium-brown, tan and yellow clay and silt, micaceous, sulfurous, no organics
97BMF-101-16-d	56	gray-brown fine silt, less clay cement, micaceous, bits of charcoal, root fiber, iron-oxidation, trace yellow
97BMF-101-17-a	6	medium-brown silt, micaceous, some charcoal
97BMF-101-17-b	17	dark brown silt, micaceous, some charcoal
97BMF-101-17-c	30	dark gray silt, micaceous, some charcoal
97BMF-101-17-d	44	medium-brown medium to fine sand, minor coarse sand, micaceous, no organics
97BMF-101-17-e	58	medium-brown, coarse to fine sand, micaceous, some charcoal, wood fiber

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
97BMF-101-18-a	5	medium-brown silt, micaceous, some wood fiber
97BMF-101-18-b	16	medium-brown silt, micaceous, iron-oxidation staining, no organics
97BMF-101-18-c	28	light brown silt, micaceous, strong iron-oxidation staining, no organics
97BMF-101-18-d	39	light brown well-sorted silt and fine sand, micaceous, charcoal
97BMF-101-18-e	47	light brown fine sand to silt, no charcoal, some clay blockiness, no wood
97BMF-101-18-f	59	light brown blocky, clay, tough, waxy, strong iron-oxidation
97BMF-101A1-a	2	tan fine sand, quartz, not micaceous, no organics
97BMF-101A1-b	10	dark tan silt, coarse to fine sand, some mica, charcoal
97BMF-101A1-c	23	tan and orange silt, blocky, minor medium coarse sand, much iron-oxidation, oxidized micas, no organics
97BMF-101A1-d	40	dark brown blocky silt, fresh slightly oxidized micas, no organics
97BMF-101A2-a	6	tan and brown fine sand, a few larger clasts, a few wood bits
97BMF-101A2-b	12	white clay, fine sand, leached, no organics
97BMF-101A2-c	23	tan-gray silt and clay, sulfides, micas, organics
97BMF-101A2-d	35	dark brown clay and silt, some oxidized micas, no organics
97BMF-101A2-e	46	medium tan-gray silt and clay, fair charcoal, much oxidized micas, some organics
97BMF-101A2-f	58	tan silt, no clay, no charcoal, minor wood fiber, some oxidized micas
97BMF-101A2-g	63	tan, tough waxy dark plug, clay, organic, moderate iron-oxidation stains, few oxidized micas
97BMF-101A3-a	7	medium-brown silt, minor clay, some oxidized micas, a few 2-3 mm grains, no organics
97BMF-101A3-b	21	medium-brown, silt, minor clay, oxidized micas, a few 2-3 mm grains, no organics
97BMF-101A3-c	31	tan blocky silt and clay, oxidized micas, no organics
97BMF-101A3-d	36	brown and orange loose fine sand, abundant oxidized micas to 1 mm, some charcoal
97BMF-101A3-e	42	medium-brown and orange, blocky clay and silt, much oxidized micas, some iron-oxidation stains, root fiber
97BMF-101A3-f	56	brown and orange medium sand to silt, much iron-oxidation stains, lot oxidized micas, minor charcoal
97BMF-101A4-a	6	medium-brown silt, some coarse sand, oxidized micas, no organics
97BMF-101A4-b	16	medium-brown silt, some coarse sand, oxidized micas, no organics
97BMF-101A4-c	26	medium-brown coarse sand to silt, oxidized micas, smells sulfurous, no organics
97BMF-101A4-d	38	brown, silt, and medium sand, oxidized micas, minor sulfur smell, no organics
97BMF-101A4-e	45	brown and orange well-sorted silt, little or no coarse sand, iron-oxidation, oxidized micas, little or no clay, no organics
97BMF-101A4-f	53	dark tan-gray well-sorted silt, some charcoal, abundant oxidized mica, no organics
97BMF-101A4-g	62	dark tan-gray well-sorted silt, some charcoal, abundant oxidized mica, no organics, some iron-oxidation

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
97BMF-101A5-a	8	medium-brown silt, oxidized micas, minor coarse sand, no organics
97BMF-101A5-b	19	medium-brown silt, oxidized micas, minor coarse sand, no organics, slight iron-oxidation
97BMF-101A5-c	28	medium-brown silt, oxidized micas, minor coarse sand, no organics, moderate iron-oxidation
97BMF-101A5-d	39	rusty brown medium to fine sand, oxidized micas, strong iron-oxidation colors, no organics
97BMF-101A5-e	45	tan and orange fine silt, medium sand, abundant oxidized micas, iron-oxidation, some wood fiber
97BMF-101A5-f	52	tan and orange coarse, medium and fine sand, charcoal, iron-oxidation, oxidized micas
97BMF-101A6-a	5	medium-tan silt, one 1/2" rock, a few coarse pebbles, some oxidized micas, minor iron-oxidation, no organics
97BMF-101A6-b	12	gray blocky silt, few micas, some root fibers
97BMF-101A6-c	23	tan-gray slightly blocky silt, minor clay, root fibers, some oxidized micas, very little iron-oxidation
97BMF-101A6-d	38	gray silt, medium to fine sand, oxidized micas, iron-oxidation, no organics
97BMF-101A6-e	47	gray silt, oxidized micas, minor charcoal, sulfur odor, no organics
97BMF-101A6-f	52	tan silt, medium sand, oxidized micas, minor wood fiber
97BMF-101A6-g	56	gray clay, some rootlets, contacts silty tails below
97BMF-101B1-a	5	yellow-gray fine sand, sulfurous smell, no organics
97BMF-101B1-b	13	yellow-gray medium to fine sand, sulfurous smell, no organics
97BMF-101B1-c	19	brown and yellow medium-to-fine sand, sulfur odor, no organics
97BMF-101B2-a	3	yellow-gray medium and fine sand, sulfurous odor, no organics
97BMF-101B2-b	14	yellow-gray medium and fine sand, sulfurous odor, no organics
97BMF-101B2-c	28	dark brown silt, peaty wood fibers
97BMF-101B2-d	43	dark gray silt and clay, iron-oxidation stains, minor charcoal, oxidized micas
97BMF-101B2-e	59	gray-brown clay and silt, medium sand, some oxidized micas, no organics
97BMF-101B4-a	3	medium-brown silt, some white leached clay, fine micas, no organics
97BMF-101B4-b	17	medium-brown silt, fine micas, no organics
97BMF-101B4-c	31	tan-brown silt, medium sand, micaceous, some wood fiber
97BMF-101B4-d	38	medium-brown silt, micaceous, some organics
97BMF-101B4-e	44	brown, slightly waxy clay, iron mottled, very fine micas, no organics
97BMF-101B4-f	47	tan-orange well-sorted silt, iron-oxidation, oxidized micas to 1mm, no organics
97BMF-101B4-g	55	tan coarse to fine sand, iron-oxidation, micas, no organics
97BMF-101B4-h	64	tan medium to fine sand, iron-oxidation, micas, no organics

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
97BMF-101B5-a	5	light brown medium to fine sand, no mica, no organics
97BMF-101B5-b	17	medium-brown homogenous silt, minor white leached material, no organics
97BMF-101B5-c	27	dark brown silt, moderate oxidized micas, orange from iron-oxidation, no organics
97BMF-101B5-d	45	orange-yellow fine homogenous silt, very strong iron-oxidation, micas, no organics
97BMF-101B5-e	62	orange-yellow homogenous silt, minor blocky, very strong iron-oxidation, micas, minor charcoal
97BMF-101B6-a	3	medium-brown blocky homogenous fine silt, some oxidized micas, no organics
97BMF-101B6-b	15	tan-brown blocky silt, a few 3 mm clasts, micaceous, some iron-oxidation, no organics
97BMF-101B6-c	25	tan coarse to fine sand, loose, micaceous, some iron-oxidation, no organics
97BMF-101B6-d	34	transition zone between c and e
97BMF-101B6-e	45	orange-yellow coarse to fine sand, strong iron-oxidation, some mafic specks, oxidized micas, no organics
97BMF-101B6-f	55	tan silt, charcoal, micaceous, moderate iron-oxidation
97BMF-101B6-g	64	tan-orange medium to fine sand, strong iron-oxidation, oxidized micas, some charcoals
97BMF-101B7-a	3	brown-buff silt, no organics
97BMF-101B7-b	8	white leached buff silt, no organics
97BMF-101B7-c	14	brown and orange silt, iron-oxidation, minor root fiber
97BMF-101B7-d	22	medium-brown and orange blocky silt, some root fibers, some iron-oxidation, fine micas
97BMF-101B7-e	33	gray and orange silt, strong iron-oxidation, some root fiber
97BMF-101B7-f	52	gray-brown and orange silt, moderate to strong iron-oxidation, no organics
97BMF-101C1-a	8	white and tan clay and silt, moist, leached, no organics
97BMF-101C1-b	17	dark brown silt, peaty organic plug, fibrous
97BMF-101C1-c	21	dark brown organic iron-rich plug, maybe some clay
97BMF-101C1-d	28	light tan clay and silt, moist, small amount of organics
97BMF-101C1-e	37	dark brown clay, minor Fe streaking, moist, organics
97BMF-101C1-f	51	brown coarse to fine sand, micaceous, light iron-oxidation, some root fibers
97BMF-101C1-g	64	brown coarse to fine sand, micaceous, light iron-oxidation, some root fibers

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
97BMF-101C2-a	3	tan-brown clay and silt, moist, no organics
97BMF-101C2-b	9	white leached clay, no organics
97BMF-101C2-c	15	dark brown peaty silt, moist, organics
97BMF-101C2-d	22	tan-brown clay and silt, slightly moist, no organics
97BMF-101C2-e	28	tan medium to fine sand, some micas, no organics
97BMF-101C2-f	34	tan blocky silt and clay, micas, no organics
97BMF-101C2-g	40	tan waxy dense organic clay
97BMF-101C2-h	45	tan-gray silt, coarse to medium sand, some oxidized micas, no organics
97BMF-101C2-i	53	tan-gray silt, coarse to medium sand, some oxidized micas, no organics
97BMF-101C2-j	62	gray silt, medium to fine sand, micas, no organics
97BMF-101C3-a	4	light-tan silt and clay, possibly leached, no organics
97BMF-101C3-b	15	chocolate-brown blocky silt, minor medium sand, no organics
97BMF-101C3-c	26	gray blocky clay, some iron-oxidation staining, no organics
97BMF-101C3-d	33	tan-gray blocky silt, some medium sand, micaceous, some iron-oxidation, no organics
97BMF-101C3-e	43	gray silt, fine sand, micaceous, some iron-oxidation, no organics
97BMF-101C3-f	58	gray silt, medium to very fine sand, micaceous, iron-oxidation, no organics
97BMF-101C4-a	6	buff-gray silt and clay, few micas, no organics
97BMF-101C4-b	18	light chocolate-brown fine sand to silt, some mica, moderate iron-oxidation stains, no organics
97BMF-101C4-c	31	gray-brown and orange silt, oxidized micas, moderately strong iron-oxidation, no organics
97BMF-101C4-d	47	medium-brown and orange medium to fine sand, many oxidized micas, iron-oxidation, no organics
97BMF-101C4-e	61	brown medium loose sand, micaceous, both oxidized and fresh biotite, iron-oxidation staining, a few wood fibers
97BMF-101C5-a	5	buff medium to fine sand, micas, organics present
97BMF-101C5-b	14	rusty brown medium and fine sand, minor clay, a few 3 mm pebbles, no organics
97BMF-101C5-c	21	yellow silt and clay, medium to fine sand, a few 2 mm pebbles, yellow sulfate, no organics
97BMF-101C5-d	30	yellow and orange silt and clay, a few organic fibers
97BMF-101C5-e	42	orange and brown coarse to medium sand, oxidized micas, unoxidized biotite in pebbles, strong iron-oxidation, no organics

**Table 4** Field Numbers, depths to midpoints of intervals, and interval sample descriptions for cores from Buckeye flotation tailings (cont.)

FieldNo	DEPTH (cm)	sample description
98BMF 102A1-a	0	brown fine sand to silt, top one inch contains wood bits, needles and grass
98BMF 102A1-b	10	tan-brown fine sand to silt, contains a few rootlets or grass blades, mica and sulfur odor
98BMF 102A1-c	19	tan-brown fine sand to silt, some oxidized material, micas, no organics
98BMF 102A1-d	28	tan silt, medium sand, some mica, oxidized materials, a few twigs and pine needles
98BMF 102A1-e	36	tan silt, medium sand, some mica, oxidized material a few twigs or pine needles
98BMF 102A2-f	47	tan-brown medium sand to silt, micas, some oxidized, no organics
98BMF 102A2-g	59	tan-brown coarse sand to silt, some pebble sized clasts, mica, no organics
98BMF 102A2-h	72	rusty-brown coarse sand to silt, mica, bottom one inch rusty-brown packed fine sand to silt, no organics